

Water

Israel has suffered from a chronic water shortage for years and in recent years it experienced drought. The increase in demand for water for domestic uses, caused by population growth and the rising standard of living, together with the need to supply water pursuant to international undertakings have led to over-utilization of its renewable water sources.

The policy for the water sector, particularly in the past decade, combined with the absence of adequate action facing the impending water shortage situation, has contributed to the severity of the present crisis.

The agricultural sector has suffered most because of the crisis. Due to the shortage, water allocations to the sector had to be reduced drastically causing a reduction in the agricultural productivity.

The current crisis has led to the realization that a master plan for policy, institutional and operational changes is required to stabilize the situation and to improve Israel's water balance with a long-term perspective.

The total average annual potential of renewable water amounts to some 1,800 MCM, of which about 95% is already exploited and used for domestic consumption and irrigation. About 80% of the water potential is in the north of the country and only 20% in the south.

Israel's main freshwater resources are: Lake Kinneret - the Sea of Galilee, the Coastal Aquifer - along the coastal plain of the Mediterranean Sea, and the Mountain Aquifer - under the central north-south (Carmel) mountain range. Additional smaller regional resources are located in the Upper Galilee, Western Galilee, Beit Shean Valley, Jordan Valley, the Dead Sea Rift, the Negev and the Arava.

The long-term average quantity of replenish able water from major water resources amounts to about 1,800 MCM per year.

The shortage of water in the southern, semi-arid region of Israel required the construction of an extensive water-delivery system that supplies water to this region from resources in the north.

Thus, most of the country's fresh water resources were inter-connected into the National Water Carrier, commissioned in 1964.

The National Water Carrier supplies a blend of surface and groundwater. Water not required by consumers is recharged into the aquifer through spreading basins and dual-purpose wells. Recharging of aquifers helps to prevent evaporation losses and, in the coastal area, intrusion of seawater.

The National Water Carrier supplies a total of 1,000 major consumers, including 18 municipalities and 80 local authorities.

In 2012, the Dan Region Wastewater Treatment Plant was cited as a global model by the United Nations. The plant, known locally as Shafdan, was lauded for its unique method of using the natural filtration qualities of sand to improve the quality of sewage.

>> For Additional Reading:

Mekorot

www.mekorot.co.il/Eng/Mekorot/Pages/IsraelsWaterSupplySystem.aspx

Wikipedia

en.wikipedia.org/wiki/Water_supply_and_sanitation_in_Israel

YouTube

www.youtube.com/watch?v=jGbX9sLvYys